

### Abstract

A method for controlling cycling of an air conditioning compressor coupled to an internal combustion engine interrupts normal cycling based on operation conditions. In addition, 5 normal engaged and disengaged cycling durations are adaptively estimated in real-time. The method of the present invention achieves improved fuel economy and improved drive feel. As an example, improved fuel economy is achieved by engaging the compressor during braking or when the engine is being driven by 10 the vehicle. As another example, improved drive feel is achieved by engaging the compressor during transient conditions when drive feel is unaffected.